**Exhibit R-2**, **RDT&E Budget Item Justification:** PB 2012 Army

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army PE 0604817A: Combat Identification

BA 5: Development & Demonstration (SDD)

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	7.740	29.884	-	-	-	-	-	-	-	Continuing	Continuing
482: Ground Combat Identification	7.740	29.884	-	-	-	-	-	-	-	Continuing	Continuing

#### Note

Program Summary Explanation: FY09, FY10 and FY11 funding realigned to higher priority requirements.

### A. Mission Description and Budget Item Justification

Combat Identification (CID) is a family of systems to maximize overall combat effectiveness by minimizing and mitigating incidents of fratricide and maximizing the situational understanding of the trigger puller across a broad spectrum of Joint and Coalition combat operations. This is accomplished by the identification of friends, enemies/foes, and neutrals in the Joint and Coalition battle space. Based on program prioritization from the Deputy Secretary of Defense and the Deputy's Advisory Working Group (DAWG), the Joint Cooperative Target Identification-Ground (JCTI-G) efforts have been refocused to address fratricide incidents involving Fires-on-Dismounts (FoD) and Air to Ground (A-G) fires. This is a Joint effort with the United States Marine Corps that will be equitably allocated in support of Fires-onDismount development. This program has been designated Special Interest by the Defense Acquisition Executive.

FY11 supports JCTI-G program efforts for FoD and A-G. These efforts assume a Materiel Development Decision (MDD) and initiation of an Analysis of Alternatives (AoA) in 2QFY10 that results in a Materiel Solution decision by the end of 4QFY10. The results of the AoA will be used to adjust the program schedule as required and inform the Army funding resource requirements for FY13. Milestone (MS) A decisions for entry into Technology Development acquisition phase for both FoD and A-G efforts are assumed to occur in 4QFY11. Efforts will focus the execution of the MS decision process to include program and acquisition document preparation. Also, efforts will include technical and acquisition planning for contract solicitation such as requirements analyses and the generation of an Acquisition Requirements Package. In addition, funding in FY11 will continue with the technical maturation efforts associated with the FoD requirement.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604817A: Combat Identification	

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	10.018	29.884	15.041	-	15.041
Current President's Budget	7.740	29.884	-	-	-
Total Adjustments	-2.278	-	-15.041	-	-15.041
<ul> <li>Congressional General Reductions</li> </ul>		-			
<ul> <li>Congressional Directed Reductions</li> </ul>		-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>		-			
<ul> <li>Congressional Directed Transfers</li> </ul>		-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments 1	-2.278	_	-15.041	-	-15.041

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Exhibit R-2A, RDT&E Project Just				DATE: February 2011								
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				<b>R-1 ITEM N</b> PE 060481	_	_	PROJECT 482: Groun	CT ound Combat Identification				
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost	
482: Ground Combat Identification	7.740	29.884	-	-	-	-	-	-	-	Continuing	Continuing	
Quantity of RDT&E Articles												

#### A. Mission Description and Budget Item Justification

Combat Identification (CID) is a family of systems to maximize overall the combat effectiveness of forces by minimizing and mitigating incidents of fratricide and maximizing the situational understanding of the trigger puller across the broad spectrum of Joint and Coalition combat operations. This is accomplished by the identification of friends, enemies/foes and neutrals in the Joint and Coalition battle space. Based on program prioritization direction from the Deputy Secretary of Defense and the Deputy's Advisory Working Group (DAWG), the Joint Cooperative Target Identification - Ground (JCTI-G) efforts have been refocused to address fratricide incidents involving Fires-on-Dismounts (FoD) and Air to Ground (A-G) fires. The FoD is a Joint effort with the United States Marine Corps. In accordance with an Army/Marine Corps MOA, funding for FoD systems development will be equitably shared between the two services. This program has been designated Special Interest by the Defense Acquisition Executive.

FY12 supports JCTI-G program efforts for FoD and A-G. With the approval of the JCTI-G Analysis of Alternatives (AoA) guidance, the scope AoA resulted is a two phased approach with the effort completing approximately six months later than originally planned. The correspondingly effect was to shift most program milestones to the right. Phase 1 will be complete by end of 4QFY10 and Phase 2 complete by the end of April 2011 resulting in a Materiel Solution recommendation. Milestone (MS) A decisions for entry into Technology Development (TD) acquisition phase for both FoD and A-G will occur in 1QFY12. FY12 efforts will include the continued staffing of the Project and Product Joint Program Offices. The efforts will finalize the program and acquisition documentation required for the MS A decision. Systems engineering efforts during FY12 will include development of the systems and technical architectures along with the requirements analysis to produce a System Performance Based Specification. The program will prepare the necessary technical and acquisition documentation for the generation of an Acquisition Requirements Package to allow the solicitation of multiple TD contracts. In addition, FY12 will continue with the technical maturation efforts associated with the FoD requirement.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Title: Alternatives of Analysis (AOA) Conduct	0.460	-	-
Articles:	0		
Description: Alternatives of Analysis (AOA) Conduct			
FY 2010 Accomplishments: Alternatives of Analysis (AOA) Conduct			
Title: Preparation for JCTI-G, Milestone (MS) A	2.000	10.000	-
Articles:	0	0	
Description: Preparation for JCTI-G, Milestone (MS) A			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: Fe	bruary 2011	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604817A: Combat Identification	PROJEC 482: Gro	tT und Combat	Identification	
B. Accomplishments/Planned Programs (\$ in Millions, Article	e Quantities in Each)		FY 2010	FY 2011	FY 2012
FY 2010 Accomplishments: Preparation for JCTI-G, Milestone (MS) A					
FY 2011 Plans: Preparation for JCTI-G, Milestone (MS) A					
Title: Fires on Dismounts (FOD) Maturation		Articles:	5.000 0	14.500 0	-
<b>Description:</b> Fires on Dismounts Maturation					

5.384

29.884

0.280

7.740

Articles:

Articles:

**Accomplishments/Planned Programs Subtotals** 

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FY 2010 Accomplishments: Fires on Dismounts Maturation

Fires on Dismounts Maturation

Title: Soldier Non Cooperative Target Identification

Soldier Non Cooperative Target Identification

**Description:** Soldier Non Cooperative Target Identification

**FY 2011 Plans:** 

**FY 2011 Plans:** 

Title: SBIR/STTR

SBIR/STTR

**Description:** SBIR/STTR

FY 2010 Accomplishments:

**PROJECT** 

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army PE 0604817A: Combat Identification 482: Ground Combat Identification

BA 5: Development & Demonstration (SDD)

#### C. Other Program Funding Summary (\$ in Millions)

			<u>FY 2012</u>	<u>FY 2012</u>	<u>FY 2012</u>					Cost To		
<u>Line Item</u>	FY 2010	FY 2011	<u>Base</u>	OCO	<u>Total</u>	FY 2013	FY 2014	FY 2015	FY 2016	Complete	<b>Total Cost</b>	
• 11309: RDTE, USMC MCPC		20.374	21.531		21.531		14.968	14.999		Continuing	Continuing	

#### D. Acquisition Strategy

Modified in accordance with the direction received from the Deputy's (Secretary of Defense) Advisory Working Group (DAWG) meeting on 22 Sep 2009. The Joint Cooperative Target Identification Ground (JCTI-G) program has been refocused to prioritize efforts to address fratricide incidents involving Fires-on-Dismounts (FoD) as the first program increment and Air-to-Ground (A-G) as second increment. The JCTI-G FoD increment is a Joint Army-Marine Corps development effort led by the Army that was codified in a 14 Jan 2010 Memorandum of Understanding between the Vice Chief of Staff of the Army and the Assistant Commandant of the Marine Corps. The JCTI-G Material Development Decision (MDD) Acquisition Decision Memorandum (ADM) was signed by the Defense Acquisition Executive, Dr. Ashton Carter on 23 Jun 2010. The MDD ADM authorized the program's entry into the Materiel Solution Analysis (MSA) Phase and commencement of an Analysis of Alternatives (AoA). The two phased AoA is expected to be completed by Apr 2011 resulting in program and materiel solution recommendations. The A-G increment is expected to include all service representation. The A-G service lead and product office structure will be further informed by the results of the AoA in FY11. The program Milestone (MS) A decision and entry into the Technology Development (TD) phase is expected in FY12. The MS A will determine the appropriate acquisition entry point for A-G increment. The MS A will be followed by the release of the FoD Acquisition Requirements Package to solicit and competitively award multiple TD contracts in FY12. Two (or more) TD cost-plus type contracts will be awarded to competing teams to develop system (or key system elements) prototypes for demonstrating in a relevant environment and conduct or a Preliminary Design Review (PDR) prior to MS B. A successful MS B along with an approved Capability Development (CDD) and Acquisition Strategy will be the criteria supporting a MS B and entry into Engineering & Manufacturing Development (EMD) Phase. The

#### **E. Performance Metrics**

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604817A: Combat Identification

PROJECT

482: Ground Combat Identification

DATE: February 2011

Management Services	(\$ in Millio	ons)		FY 2	011		2012 se		2012 CO	FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management	Various	PM NavSys/PM TIMS:various	8.778	1.524		-		-		-	Continuing	Continuing	Continuing
	•	Subtotal	8.778	1.524		-		_		-			

Product Development (	\$ in Millio	ns)		FY 2	2011	FY 2 Ba	2012 Ise	FY 2		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
B-Kit Development	Various	TRW:various	69.765	-		-		-		-	Continuing	Continuing	Continuing
A-Kit Development (Abrams)	Various	GDLS:various	10.909	-		-		-		-	Continuing	Continuing	Continuing
A- Kit Development (Bradley)	Various	UDLP:various	3.364	-		-		-		-	Continuing	Continuing	Continuing
A-Kit Development (Various)	Various	E&S, TRW, UDLP, AM General, Raytheon.:various	5.836	-		-		-		-	Continuing	Continuing	Continuing
Air-to-Ground Efforts	Various	I2WD:various	2.206	-		-		-		-	Continuing	Continuing	Continuing
Air-to-Ground Solution Efforts	Various	Sandia National Labs/ DOE:various	0.550	-		-		-		-	Continuing	Continuing	Continuing
Combat Identification International Efforts	Various	Raytheon:various	0.415	-		-		-		-	Continuing	Continuing	Continuing
BTID Cost Reduction Efforts	Various	Raytheon:various	6.745	-		-		-		-	Continuing	Continuing	Continuing
RF Tags Program Efforts	Various	I2WD:various	2.023	-		-		-		-	Continuing	Continuing	Continuing
RF Tag Prototypes	Various	BAE:various	0.800	-		-		-		-	Continuing	Continuing	Continuing
JCTI-G, MS B Documentation	Various	CE LCMC/Support Contractors:various	0.500	-		-		-		-	Continuing	Continuing	Continuing
JCTI-G, Risk Reduction	Various	Raytheon:various	0.297	-		-		-		-	Continuing	Continuing	Continuing
JCTI-G, Risk Reduction	Various	SRC:various	0.570	-		-		-		-	Continuing	Continuing	Continuing
JCTI-G, Risk Reduction	Various	BAE:various	1.310	-		-		-		-	Continuing	Continuing	Continuing
AOA Conduct	Various	TRADOC:various	-	-		-		-		-	Continuing	Continuing	Continuing
Soldier Non Cooperative Target Identification	Various	TBD:TBD	-	5.384		-		-		-	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604817A: Combat Identification

PROJECT

482: Ground Combat Identification

**DATE:** February 2011

Product Development (	\$ in Millio	ns)		FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Air-to-Ground MS B Preparation	Various	CE LCMC:various	1.000	-		-		-		-	Continuing	Continuing	Continuing
Fires on Dismounts Technical Maturation	Various	CERDEC:various	-	14.500		-		-		-	Continuing	Continuing	Continuing
Technology Development, Prototyping, Contracts	Various	TBD:TBD	-	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	106.290	19.884		-		-		-			

Support (\$ in Millions)				FY 2	011		2012 ise		2012 CO	FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Matrix Support	Various	CE LCMC, I2WD:various	9.328	1.686		-		-		-	Continuing	Continuing	Continuing
System Eng/Tech Assistance	Various	Lockheed Martin R4,:Eatontown, NJ	10.574	3.790		-		-		-	Continuing	Continuing	Continuing
Test Planning	Various	CERDEC:Various	1.687	1.250		-		-		-	Continuing	Continuing	Continuing
Technical Support	Various	Sandia National Laboratories/ IDA:Various	0.570	1.750		-		-		-	Continuing	Continuing	Continuing
		Subtotal	22.159	8.476		-		-		-			

Test and Evaluation (\$	in Millions	3)		FY 2	2011	FY 2 Ba	2012 se	FY 2	2012 CO	FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test, Log Demo, SCD, IOTE	Various	ATEC:various	3.513	-		-		-		-	Continuing	Continuing	Continuing
Limited User Test	Various	ATEC:various	0.673	-		-		-		-	Continuing	Continuing	Continuing
ASCIET	Various	Misc.:various	6.651	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	10.837	-		-		-		-			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army 3A 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604817A: Combat Identification	PROJECT 482: Ground	d Combat Identification

_											
-	Total Prior										Target
	Years			FY 2	2012	FY 2	2012	FY 2012	Cost To		Value of
	Cost	FY 20	011	Ва	se	00	co	Total	Complete	<b>Total Cost</b>	Contract
Project Cost Totals	148.064	29.884		-		-		-			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army

APPROPRIATION/BUDGET ACTIVITY
2040: Research, Development, Test & Evaluation, Army
BA 5: Development & Demonstration (SDD)

DATE: February 2011

R-1 ITEM NOMENCLATURE
PE 0604817A: Combat Identification
482: Ground Combat Identification

		FY 2010 FY 2011		FY 2012				FY 2013			3	FY 2014					FY 2015				FY 2016							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Materiel Development Decision												,														,		
JCTI-G Materiel Solution Phase																												
JCTI-G Fires on Dismount Maturation																												
JCTI-G Request for Proposal Prep																												
JCTI-G Milestone A																												
JCTI-G Source Selection																												
JCTI-G Technology Development																												
JCTI-G Milestone B																												
JCTI-G Engineering & Manufacturing Development																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army	DATE: February 2011				
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT			
2040: Research, Development, Test & Evaluation, Army	PE 0604817A: Combat Identification	482: Ground	d Combat Identification		
BA 5: Development & Demonstration (SDD)					

# Schedule Details

	St	E	nd	
Events	Quarter	Year	Quarter	Year
Materiel Development Decision	2	2010	2	2010
JCTI-G Materiel Solution Phase	2	2010	4	2011
JCTI-G Fires on Dismount Maturation	4	2010	3	2012
JCTI-G Request for Proposal Prep	2	2011	1	2012
JCTI-G Milestone A	4	2011	4	2011
JCTI-G Source Selection	1	2012	3	2012
JCTI-G Technology Development	3	2012	3	2014
JCTI-G Milestone B	4	2014	4	2014
JCTI-G Engineering & Manufacturing Development	4	2014	4	2016

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